



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,170	06/13/2001	Eun Cheol Lee	YHK-0066	3664
34610	7590	06/29/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			WU, XIAO MIN	
			ART UNIT	PAPER NUMBER
			2674	
DATE MAILED: 06/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,170

Applicant(s)

LEE ET AL.

Examiner

XIAO M. WU

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 13, 14 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 5, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-10, 13-14, 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanazawa et al. (US Patent No. 6,288,692).

As to claims 1, 13, 14, 19, Kanazawa discloses a plasma display panel (Fig. 13), comprising: an address electrode (53) included in each discharge cell making a unit pixel (subpixels 55, 56 forming one unit pixel) of the plasma display panel; a plurality of second sustain electrodes (X_0, X_e) positioned at each periphery of the discharge cell (55, 56) in a direction crossing the address electrode (53) to receive a second sustaining pulse (Fig. 16); and at least one of the first sustain electrodes (51) positioned at the center of the discharge cell (55, 56) in a direction crossing the address electrode (53) to receive a first sustaining pulse (Fig. 16) applied alternatively with respect to the second sustain electrodes (see Fig. 16). Kanazawa further discloses the plurality of second sustain electrodes is unique to each of the discharge cells e.g. the discharge cell including sub-cell 55, 56) associated with the address electrode.

As to claim 2, Kanazawa discloses that the first sustain electrodes (51) are provides between the second sustain electrodes (X_0, X_e).

As to claim 3, Kanazawa discloses a bus electrode arranged in parallel to the first sustain electrode at the center of the first sustain electrode (see Fig. 8).

As to claim 4, Kanazawa discloses bus electrodes arranged in parallel to the first sustain electrode at each edge of the first sustain electrode (Fig. 2).

As to claim 6, Kanazawa discloses a first barrier rib formed in parallel to the address electrode (see Figs. 3 and 10).

As to claims 7 and 8, it is noted that Kanazawa disclose a second barrier rib formed in a direction crossing the first barrier rib and the second barrier rib is provided at an interface of the discharge cells (see Figs. 3 and 10)

As to claims 9, 10, Kanazawa discloses a scan/sustain driver (63, Fig. 13) connected to the first sustain electrode (51) to apply the scanning pulse Fig. 4) and the first sustaining pulse (Fig. 16); and a common sustaining driver (61₀, 61_e, Fig. 13) connected to the second sustain electrode (X₀, X_e) to apply the second sustaining pulse (Fig. 16). Kanazawa further discloses applying a reset pulse (V_w, Fig. 16) to the first sustain electrode (Y).

As to claims 13, 14, note the discussion of claim 1 above, Kanazawa further discloses applying a reset pulse (V_w, Fig. 16) to the second sustain electrode (X₀, X_e) and applying a data pulse (Fig. 16) synchronized with the scanning pulse to the scanning electrode (51).

As to claim 20, Kanazawa discloses a display panel, comprising: a plurality of first sustain electrodes (Y1, Y2, Y3, ..., Fig. 13) in a first direction; a plurality of second electrodes (x₀, x_e, ..., Fig. 13) in the first direction; and a plurality of address electrodes (53) in a second direction, which is different from the first direction such that the plurality of first and second

Art Unit: 2674

substation electrodes cross with the plurality of address electrodes, wherein there are at least more than two second sustain electrodes (x_o, x_e) than the first sustain electrode (Y, see Fig. 13).

As to claim 21, Kanazawa discloses the plurality of first sustain electrode are scan electrodes (Y1, Y2, Y3, see Fig. 13).

As to claim 22, Kanazawa discloses the plurality of second sustain electrodes are common sustain electrode (x_o, x_e, \dots , Fig. 13).

As to claim 23, Kanazawa discloses there are twice as many second sustain electrodes (x_o, x_e, \dots , Fig. 13) than the first electrode (Y1, Y2, Y3, see Fig. 13).

As to claim 24, Kanazawa discloses a plurality of discharge cells are associated with each of the plurality of address electrodes, and the plurality of second sustain electrodes is unique to each of the plurality of address electrodes for each discharge cell (e.g. the discharge cell including sub-cell 55, 56).

Allowable Subject Matter

3. Claims 5 and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claim 18 is allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 6-10, 13-14, 19-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **XIAO M. WU** whose telephone number is 571 272-7761. The examiner can normally be reached on 6:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **PATRICK EDOUARD**, can be reached on 571 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2674

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

x.w.

June 24, 2005



XIAO M. WU
Primary Examiner
Art Unit 2674